

PROGRAMMABLE ENERGY SAVING TIMER

ASAP Timers, LLC

Multi-Family Timer

Model A-1

User Manual

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Warning: Do not use the Programmable Energy Saving Timer as a means of disconnect. Always turn off the circuit breaker before servicing the water heater.

Product Information

The ASAP Programmable Energy Saving Timer was specifically designed to meet electric utilities need for dedicated peak control of electric water heaters, while offering customer flexibility.

With a state-of-the-art microprocessor technology, the Energy Saving Timer offers programming capabilities flexible enough to accommodate Utilities load management strategies as well as consumers desires to save energy and money, and also reduce peak year round demand for electricity.

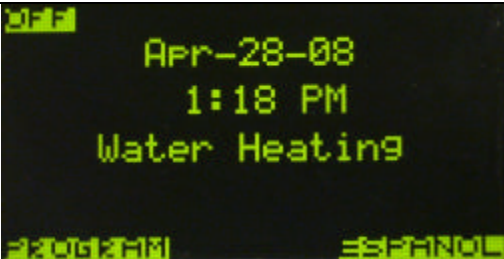
The Energy Saving Timer can be programmed by you, the electricity consumer, to stop heating your water to save energy during times that you don't normally use it. It will also stop heating water during peak demand periods to keep your rates low. An override feature for a set period is available each day to allow for exceptions, but hot water usage during these peak periods is normally low so this will not be an inconvenience.



Figure 1: ASAP Programmable Energy Saving Timer

Figure 2: Touch Points for Operating Timer Located Under Door



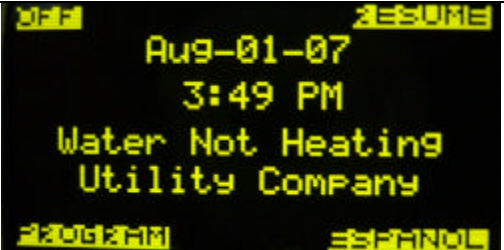
Normal Operation	 <p>Figure 3: Normal Operation Screen</p>
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Display and Touch points

During normal operation, the display will be similar to **Figure 3**; the date and time are preprogrammed for you. The touch points surrounding the display (see **Figure 2**) serve as buttons to activate programming and display features. The display will always indicate the current meaning of each touch point.

For example, to change to Spanish, press the touch point below **ESPAÑOL**. Activate user programming by pressing the touch point below **PROGRAM**. The **OFF** function will indicate that water is not heating until you manually turn it on by pressing the **ON** touch point.

During normal operation, the display will dim if no touch points have been pressed for a period of time. To brighten the display, press any touch point. Note that this first touch point press will be ignored; the next touch point pressed will perform its normal function.

Peak Electricity Demand Periods set by your utility co.	 <p>Figure 4: Water Not Heating During Peak Demand Periods</p>
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During the peak electricity demand period (except on holidays and weekends), the timer will stop heating water and display a screen similar to **Figure 4**. Normally there will be sufficient hot water available during this low usage time, however, if you should require water heating, press the touch point to the right of **RESUME**. This will provide up to 60 minutes of additional hot water heating. When the **RESUME** touch point is pressed, the Timer will display a countdown clock of minutes remaining as shown in Figure 5. To stop the 60-minute timer, press the touch point to the left of **OFF**

Press Resume to obtain up to 60 minutes additional heating during Peak Periods.



Figure 5: Water Heating Available During the Peak Period

The Timer has the 10 standard federal holidays programmed into it at the factory. It will also automatically adjust for Daylight Savings Time as per the Energy Policy Act of 2005.

User Programming

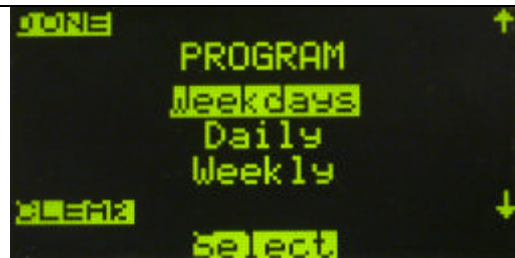


Figure 6: Programming Options

On the normal operating screen, press **PROGRAM** to enter user programming. The display will show the options available to you as shown in **Figure 6** and **Table 1**. Each option has multiple times available.

- Use the **UP** and **DOWN** arrows to scroll the screen to highlight the desired option.
- Press **SELECT** to add or change programming for the highlighted type.
- Press **CLEAR** to delete all programming for the highlighted type.
- Press **DONE** to return to the normal operating screen.

Table 1: User Programming Options

Option	Stop heating the water ...
Weekdays (Monday 12am – Friday midnight)	...at the same time every weekday
Daily	...at the same time every day
Weekly	...at the same time on a specified day each week
Weekends (Saturday 12am – Sunday midnight)	...at the same time on both Saturday and Sunday
Vacation	...for the entire day or days specified
Bilingual	...English and Spanish

Weekdays Programming Option

Use to stop heating the water at the same time
Monday through Friday
(Monday 12am – Friday midnight)

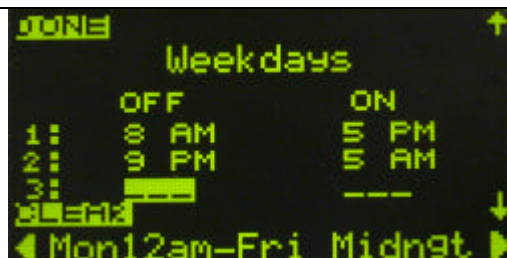


Figure 7: Weekdays Programming Screen

- Use the **UP** and **DOWN** arrows to increment or decrement the highlighted field.
- Press **LEFT** or **RIGHT** arrows to move between fields.
- Press **CLEAR** to delete programming on the highlighted line.
- Press **DONE** to return to the Programming Options Screen.

Daily Programming Option

Use to stop heating the water at the same time every day



Figure 8: Daily Programming Screen

- Use the **UP** and **DOWN** arrows to increment or decrement the highlighted field.
- Press **LEFT** or **RIGHT** arrows to move between fields.
- Press **CLEAR** to delete programming on the highlighted line.
- Press **DONE** to return to the Programming Options Screen.

Weekly Programming Option

Use to stop heating the water at the same time on a specified day each week



Figure 9: Weekly Programming Screen

- Use the **UP** and **DOWN** arrows to increment or decrement the highlighted field.
- Press **LEFT** or **RIGHT** arrows to move between fields.
- Press **CLEAR** to delete programming on the highlighted line.
- Press **DONE** to return to the Programming Options Screen.

Weekends Programming Option

Use to stop heating the water at the same time on both Saturday and Sunday

(Saturday 12am – Sunday midnight)




Figure 10: Weekends Programming Screen

- Use the **UP** and **DOWN** arrows to increment or decrement the highlighted field.
- Press **LEFT** or **RIGHT** arrows to move between fields.
- Press **CLEAR** to delete programming on the highlighted line.
- Press **DONE** to return to the Programming Options Screen.


Vacation Programming Option

The Vacation Programming Option consists of two screens: the Calendar screen as shown in **Figure 11** and the List screen as shown in **Figure 12**. When a day is selected for a vacation, the water heater will stop heating the water at midnight on the first day of your vacation and on again at midnight on the last day of your vacation. You can select 9 vacations up to 1 year in advance.

<p>Vacation Programming Option – Calendar screen</p> <p>Use to stop heating the water for the entire day or days specified</p>	 <p>Figure 11: Vacation Programming Calendar Screen</p>
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When the Vacation programming Option is first selected, the Month will be highlighted. To program vacation day(s):

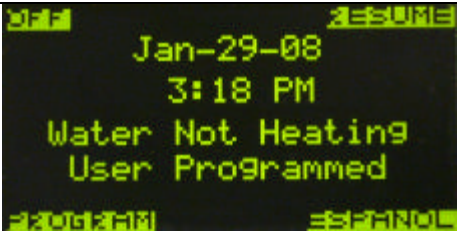
1. Press the **UP** and **DOWN** arrows to move a month at a time to when your vacation will start.
2. Press the **SELECT** touch point to confirm the month
3. Use the **UP**, **DOWN**, **RIGHT** and **LEFT** arrow touch points to highlight each day of your vacation and press **SELECT**. A box will surround each selected vacation day.
4. To clear a day, press the **CLEAR** touch point; this will appear when a vacation day is highlighted.
5. Press the **DONE** touch point when complete.

<p>Vacation Programming Option – List screen</p>	 <p>Figure 12: Vacation Programming List Screen</p>
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When the **DONE** touch point is pressed on the Vacation Programming Calendar screen, the Timer will display a list of the vacation days entered in month-day form as shown in **Figure 12**. A one-day vacation will be represented by same date in the **OFF** and **ON** columns.

The following touch points are active on this screen:

- Use the **UP** and **DOWN** arrows to move between lines.
- Press **CLEAR** to delete programming on the highlighted line.
- Press **DONE** to return to the Programming Options Screen.

Temporary Override of User Programming	
	Figure 13: Programmed Off Time Screen

When the water is not heating because of a programmed off period, the display will be shown as in **Figure 13**. Although you can always change the programmed off periods to resume water heating, you may want to just temporarily override the programming without changing it. To do this, press the touch point to the right of **RESUME**. This override will remain in effect until the current programming schedules the water heater to begin heating again. You may also resume the normal programming by entering and exiting program mode.

PERSONAL PROGRAMMING EXAMPLES

Example 1: 1 or 2 people both working or away from home 8 hours per day

Program; weekdays (pg 4)	Weekdays
OFF	ON
1: 12am	5am
2: 7 am	4pm
3: 6 pm	12am

Program; weekends (pg 6)	Weekends
OFF	ON
1: 12am	7am
2: 9am	6pm
3: 8pm	12am

If this example is used, you can save 7,300 hours or 304 days that water is not heating.

Example 2: Family of 5, 2 adults and 3 children

Program; weekdays (pg 4)	Weekdays
OFF	ON
1: 12am	5am
2: 7am	4pm
3: 9pm	12am

Program; weekends (pg 6)	Weekends
OFF	ON
1: 12am	7am
2: 9pm	12am

If this example is used, you can save 5,470 hours or 227 days that water is not heating.

Specifications

Dimensions (W x H x D inches)	7 x 5 ¼ x 2 ½
Supply Voltage	240 or 208V
Line Ampacity	30 Amps
Battery Life	10 years
Holidays -10 standard federal holidays	New Year's Day, Birthday of Martin Luther King, Jr., Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and Christmas Day
Number of User Weekday periods	3
Number of User Daily periods	3
Number of User Weekend periods	3
Number of User Weekly periods	3
Number of User Vacation Periods	9
Daylight Savings Time Correction	Automatic
Leap Year	Automatic
Peak Time Override Available	Maximum of 60 minutes per day

For Customer Inquiries:

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INSTALLATION

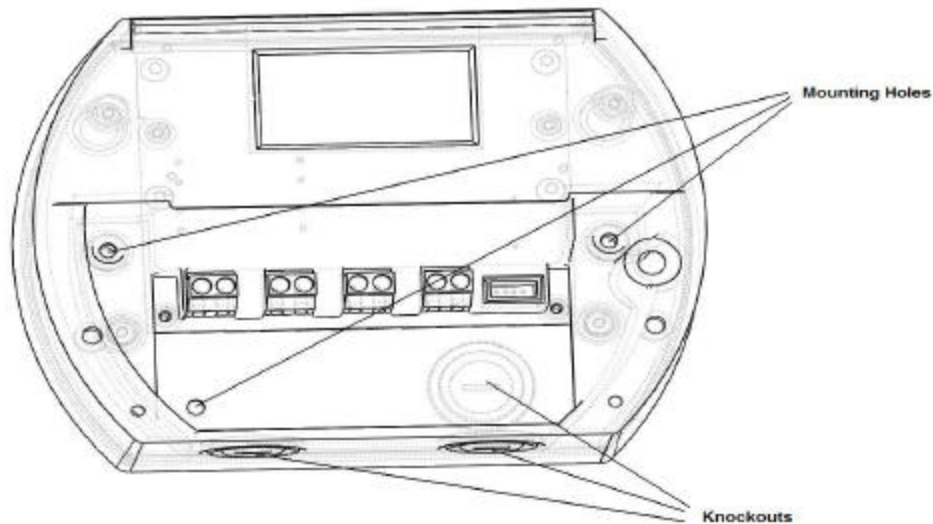
It is your responsibility: To contact a qualified electrical installer.

To assure that the electrical installation is adequate and in conformance with the National Electrical Code, ANSI/NFPA 70 – latest edition and all local codes and ordinances. Failure to comply with instructions could result in personal injury and/or property damage!

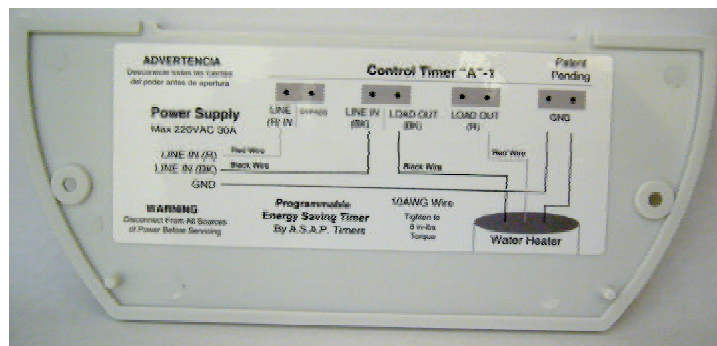
WARNING: DISCONNECT THE POWER SOURCE BEFORE INSTALLING THIS PROGRAMMABLE ENERGY SAVING TIMER.

Mounting Timer

Mount the timer in the desired location about three inches (3”) under the electrical sub panel or near the water heater using the three (3) mounting holes which are provided



Installation wiring diagram on back of front cover, as shown below;



Warning: Do not use the Programmable Energy Saving Timer as a means of disconnect. Always turn off the circuit breaker before servicing the water heater.